

WHAT IS CLAIMED IS:

1. A common mode choke coil comprising:

a Mn-Zn ferrite core which is shaped square, forms a closed magnetic path, and which has an initial permeability of at least 3,000 at 100 kHz and at least 100 at 10 MHz at room temperature; and

first and second edgewise windings which are formed respectively of first and second rectangular insulated wires, said first edgewise winding being provided around a core leg of said Mn-Zn ferrite core, and said second edgewise winding being provided around a core leg of said Mn-Zn ferrite core located oppositely to said core leg having said first edgewise winding provided therearound.

2. A common mode choke coil as claimed in Claim 1, wherein said Mn-Zn ferrite core has a main component composition comprising 44.0 to 49.8 mol%  $\text{Fe}_2\text{O}_3$ , 15.0 to 26.5 mol%  $\text{ZnO}$ , 0.1 to 3.0 mol%  $\text{CoO}$ , 0.02 to 1.00 mol%  $\text{Mn}_2\text{O}_3$  and the remainder consisting of  $\text{MnO}$ , and also has a subsidiary component composition comprising at least one of 0.010 to 0.200 mass%  $\text{V}_2\text{O}_5$ , 0.005 to 0.100 mass%  $\text{Bi}_2\text{O}_3$ , 0.005 to 0.100 mass%  $\text{In}_2\text{O}_3$ , 0.005 to 0.100 mass%  $\text{PbO}$ , 0.001 to 0.100 mass%  $\text{MoO}_3$  and 0.001 to 0.100 mass%  $\text{WO}_3$ .

3. A common mode choke coil as claimed in Claim 1, wherein said Mn-Zn ferrite core has a main component composition comprising 44.0 to 49.8 mol%  $\text{Fe}_2\text{O}_3$ , 15.0 to 26.5 mol%  $\text{ZnO}$ , 0.02 to 1.00 mol%  $\text{Mn}_2\text{O}_3$  and the remainder consisting of  $\text{MnO}$ , and also has a subsidiary component composition comprising at least one of 0.010 to 0.200 mass%  $\text{V}_2\text{O}_5$ , 0.005 to 0.100 mass%  $\text{Bi}_2\text{O}_3$ , 0.005 to 0.100 mass%  $\text{In}_2\text{O}_3$ , 0.005 to 0.100 mass%  $\text{PbO}$ , 0.001 to 0.100 mass%  $\text{MoO}_3$  and 0.001 to 0.100 mass%  $\text{WO}_3$ .

4. A line filter comprising:

a Mn-Zn ferrite core which is shaped square, forms a closed magnetic path, and which has an initial permeability of at least 3,000 at 100 kHz and at least 100 at 10 MHz at room temperature; and

first and second edgewise windings which are formed respectively of first and second rectangular insulated wires, said first edgewise winding being provided around a core leg of said Mn-Zn ferrite core, and said second edgewise winding being provided around a core leg of said Mn-Zn ferrite core located oppositely to said core leg having said first edgewise winding provided therearound, wherein

one terminations of said first and second edgewise windings are input terminals, the other terminations of said first and second edgewise windings are output terminals, and said first and second windings are connected to each other such that respective magnetic fluxes generated by said first and second edgewise windings cancel out each other when a line current is applied to said input terminals.